

# Diploma Thesis Assignment

Student: **Bc. Jakub Trušina**

Study Programme: N2301 Mechanical Engineering

Study Branch: 3901T003 Applied Mechanics

Title: Design and Strength Analysis of the Autonomous Train Control Panel  
Cover Opening  
Návrh a analýza mechanismu otevírání krytů řídicího pultu autonomního vlaku

The thesis language: English

## Description:

The design of the control panel cover opening.  
The positioning of the mechanism.  
The design of the cover mechanism fixing.  
The mechanism strength analysis due to determined force loading.

## References:

Crisfield M. A. Non-linear Finite Element Analysis of Solids and Structures. John Wiley & Sons Ltd, Baffins Lane, Chichester, 1997.  
Vinogradov, O. : Fundamentals of Kinematics and Dynamics of Machines and Mechanisms. CRC Press, London, 2000.  
Hoschl C. : Pružnost a pevnost ve strojnictví. SNTL / Alfa, Praha, 1971.  
Brát V. : Maticové metody v analýze a syntéze prostorových vázaných mechanických systémů. Academia, Praha 1981  
O. C. Zienkiewicz. Computational Structural Analysis and Research Skills. McGraw-Hill, London, 1977.

Extent and terms of a thesis are specified in directions for its elaboration that are opened to the public on the web sites of the faculty.

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